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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,226	11/05/2003	Melvin A. Park	140-102	7994
7590 09/16/2005			EXAMINER	
Ward & Olivo			FERNANDEZ, KALIMAH	
708 Third Aver New York, NY			ART UNIT	PAPER NUMBER
New Tork, IVI Tool/			2881	
			DATE MAILED: 00/16/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

AK	,

	Application No.	Applicant(s)				
	10/702,226	PARK, MELVIN A.				
Office Action Summary	Examiner	Art Unit				
	Kalimah Fernandez	2881				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 28 Ju						
,	,					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	х рапе Quayle, 1935 С.D. 11, 45					
Disposition of Claims						
4) ☐ Claim(s) 62-93 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 62-93 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	vn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on is/are: a)☐ accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex	epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	_					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					
S. Patent and Trademark Office						

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#### **DETAILED ACTION**

### Claim Warning

- 1. Applicant is advised that should claim 79 be found allowable, claim 85 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).
- 2. In addition, a series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim that depends from a dependent claim should not be separated by any claim that does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

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### **Double Patenting**

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1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 62-63, 70-72, 76, 79-80 and 83-86 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,657,191. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference is an obvious variation of the patented invention.

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3. Specifically, the difference between the present claim 62 and the patented claim 3 is the added feature: "removably connected." It is not inventive to merely make old parts of an device removably connected without producing any new and unexpected result. It could have been logically inferred from the patent to make the flexible material of patented claim 3 removable for cleaning purpose; therefore, an ordinary artisan would have obvious motivation to make the first section removable as recited in the present claim 62.

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- 4. It follows that the present claims 63, 79 and 85 are not patentable under the doctrine of double patenting, because they recite substantially the same limitations of patented claims 3 and 4 except for "removably connected" limitation discussed above.
- 5. Instant claim 69 is an obvious variation of patented claim 5, because the difference is the recitation "a substantially airtight." This modification would have been obvious to an ordinary artisan for improved transitional vacuum conditions.
- 6. Patented claim 24 fairly suggests the present claim 76 such that the difference does not constitute a patentable advance in view of patented

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claim 62. Here, instant claim 76 is an obvious combination of limitations in patented claims 24 and 62.

- 7. Present claims 70-72 are obvious variations of the patented claim 6. Here, an ordinary artisan could logically infer from the patented claim 6 and the state of the art that the first and second capillary sections are situated for mass analyzer introduction, wherein the second section is located within a vacuum region. Present claims 73-74 vary from patented claim 45 in an obvious way, because an ordinary artisan can easily envisage the difference from the state of the art.
- 8. Present claim 80 is an obvious variation of patented claim 22. Likewise, present claim 81 is an obvious variation of patented claim 12.
- 9. Instant claims 83-84 is substantially similar to patented claim 21 and deem unpatentable under the obvious double patenting doctrine.
- 10. Likewise, present claim 86 is unpatentable in view of patented claim 54. The difference between claim 86 and claim 54 is the omission "the multiple section capillary device." Instant claim 86 encompasses patented claim 54.

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# Claim Rejections - 35 USC § 102

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11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 12. Claims 86-91 and 93 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 6,410,915 issued to Bateman et al.
- 13. Bateman et al disclose forming sample spray droplets from at least one of a plurality of ion sources (see for example col.3, lines 24-33).
- 14. Bateman et al disclose desolvating the droplets to form sample ions (col.4, lines 20-23).
- 15. Bateman et al disclose positioning a sampling orifice in alignment with a first of the ion sources to receive the sample ions (see for example col.5, lines 2-18; col.10, lines 6-32).

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16. Bateman et al disclose introducing the sample ions into the mass analyzer from the sampling orifice through a capillary device (see col.10, lines 35-41).

- 17. As per claim 87, Bateman et al disclose the plurality of ESI (see for example col.8, lines 49-54).
- 18. As per claim 88, Bateman et al suggest a mix of: ESI and pneumatic sprayers (see col.4, lines 37-45).
- 19. As per claim 89, Bateman et al disclose directing heated drying gas onto the droplets during the desolvating (see col.4, lines 20-23).
- 20. As per claims 90-91, Bateman et al disclose forming a sample spray of second droplets from a second one of the plurality of ion sources and desolvating the second droplets to form secondary sample ions. In col.6, lines 45-48, Bateman et al disclose forming a first droplet spray and then a second droplet spray.
- 21. As per claim 93, Bateman et al disclose the sampling orifice is movable in a planar direction during the positioning (see fig. 4; col.8, lines 49-67).

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# Claim Rejections - 35 USC § 103

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22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 23. Claim 92 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bateman et al and US Pat No 5,848,751 issued to Wang et al.
- 24. Bateman et al teach the claimed invention except for a flexible capillary.
- 25. However, Wang et al teach the desirability of a flexible capillary (see col.5, lines 27-32).
- 26. It would have been obvious to an ordinary artisan at the time of the invention to combine Bateman et al and Wang et al, because Wang et al teach improved flexibility and reduced brittleness.

#### Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat No. 6,753,521 issued to Park et

al. This invention, by the same inventor, discloses a removable connection in claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalimah Fernandez whose telephone number is 571-272-2470. The examiner can normally be reached on Mon-Tues 6:30-3:30; Wed-Thurs 8-5 and Fri.9am-6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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